

This slide pack is provided on the following basis:

- The slide pack was used to assist Powerlink Queensland present at the 2018 Transmission Network Forum on 7 September 2018. The slide pack is not a stand alone document. It must be interpreted in the context of the verbal presentation made on the day of the forum.
- Aspects of this slide pack are protected by Copyright law. The slide pack is provided on the basis that it can only be used for internal review purposes. No part may be reproduced or reused outside of the recipient organisation for any purpose whatsoever without the express consent of Powerlink Queensland.
- While care was taken in preparation of the slide pack, and it is provided in good faith, Powerlink Queensland accepts no responsibility or liability for any loss or damage that may be incurred by any person acting in reliance of the slide pack or assumption drawn from it, except to the extent that liability under any applicable Queensland or Commonwealth of Australia statute cannot be excluded.

# Breakout Session 2

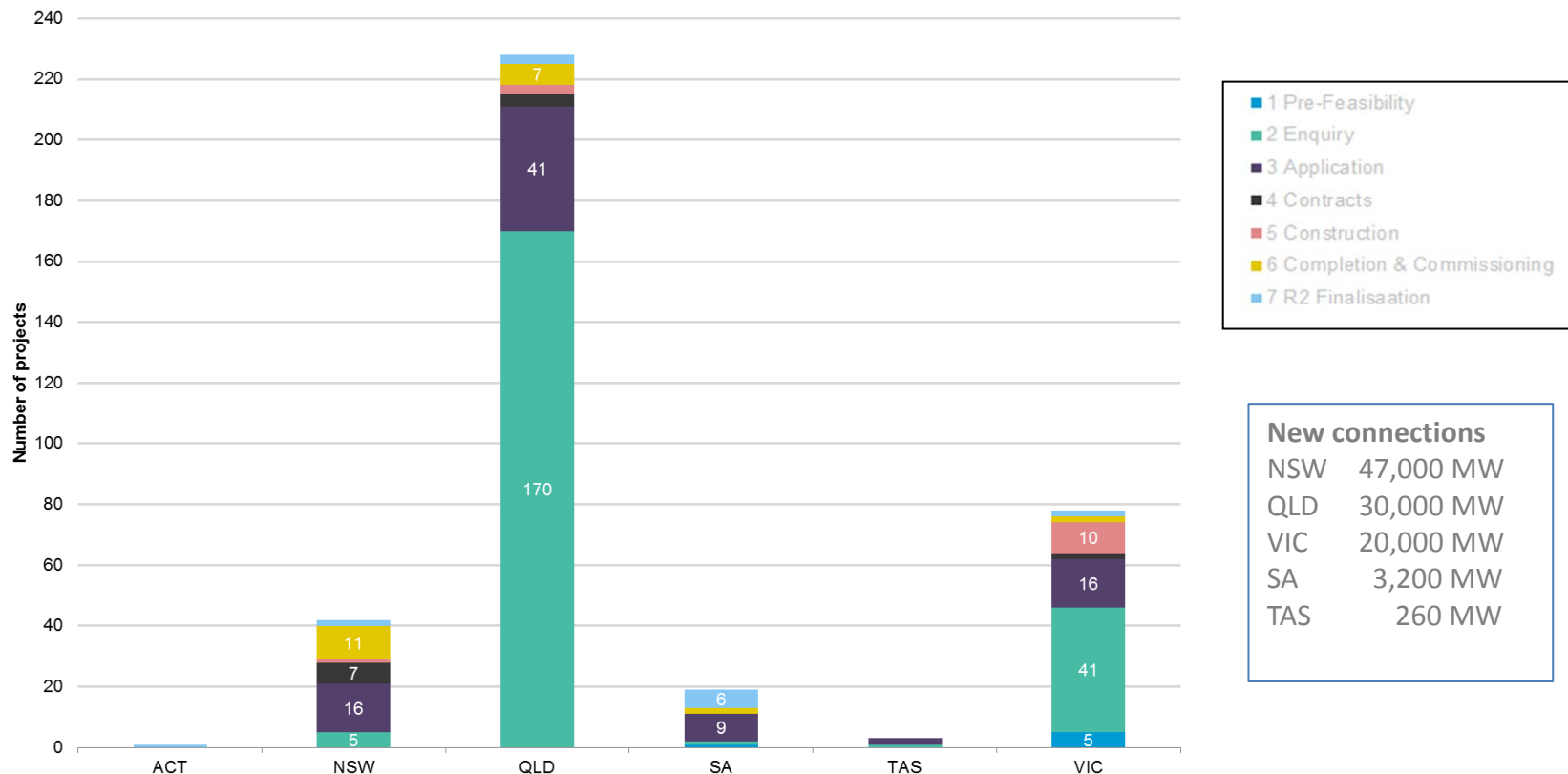
## Navigating the Renewable Connection Process



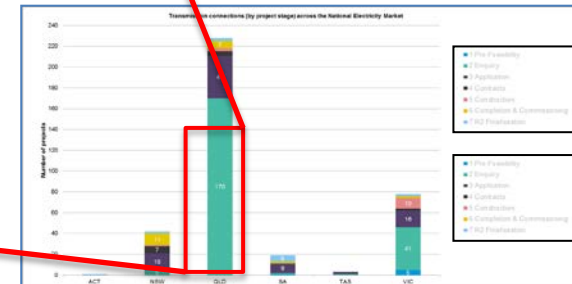
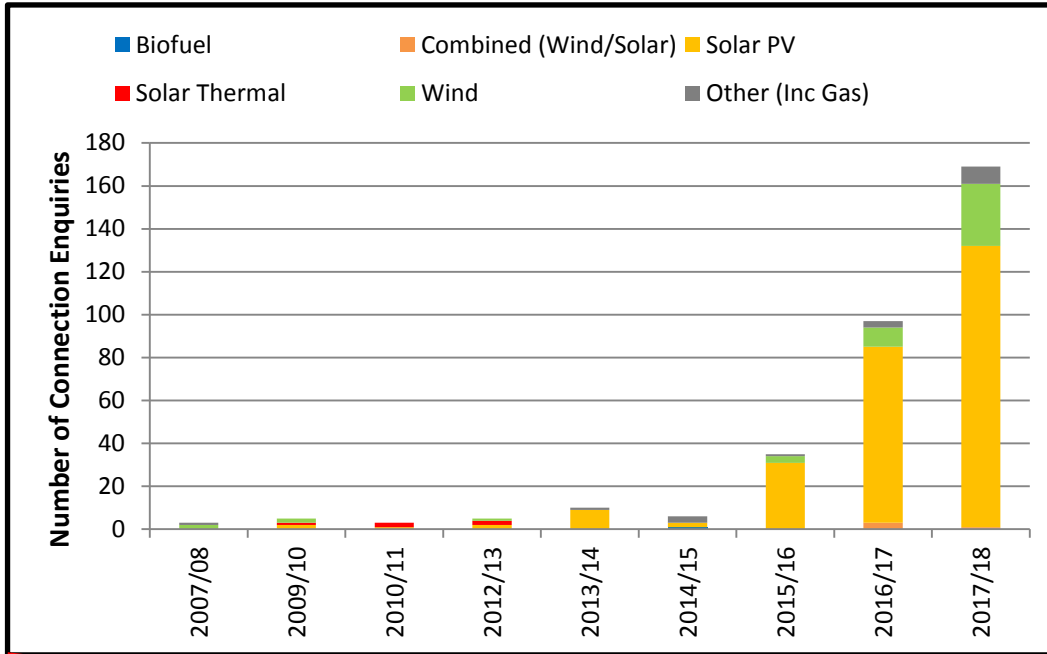
# Renewable connections



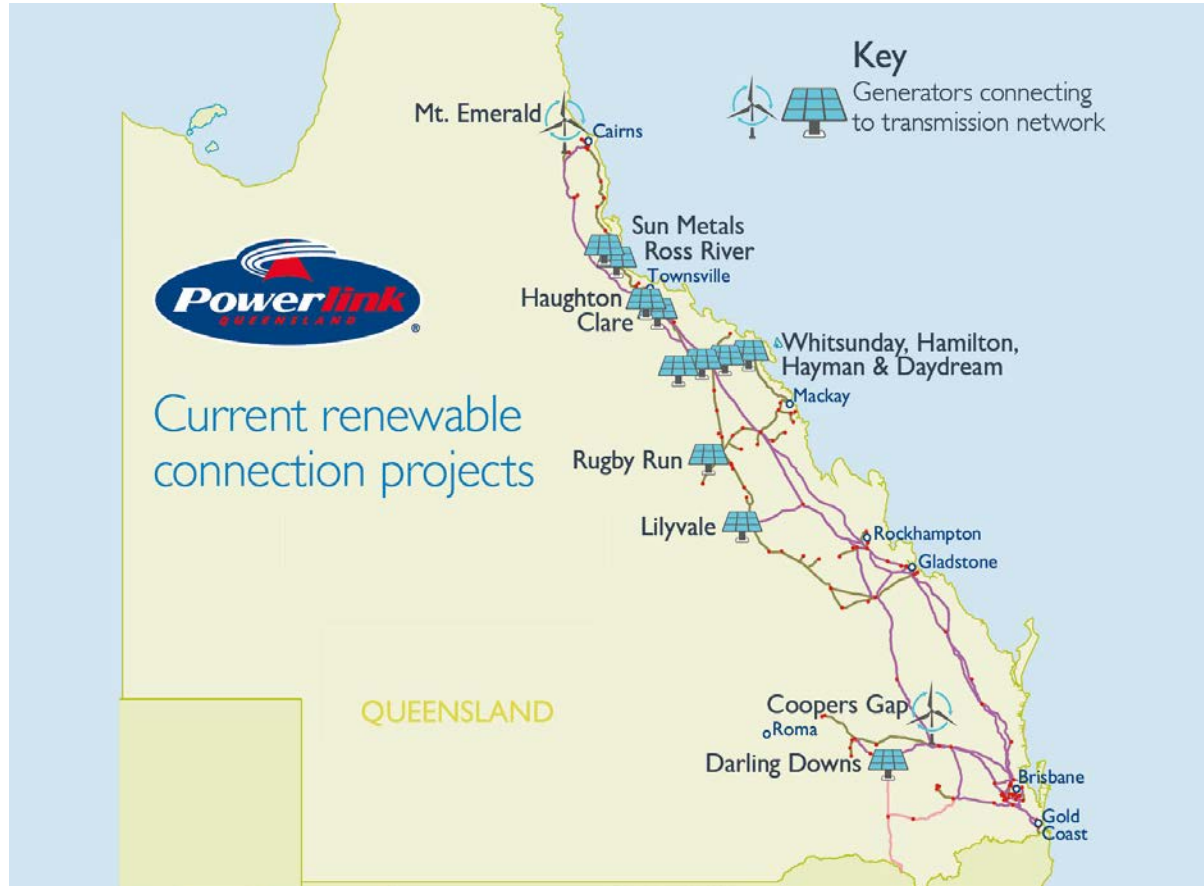
Transmission connections (by project stage) across the National Electricity Market



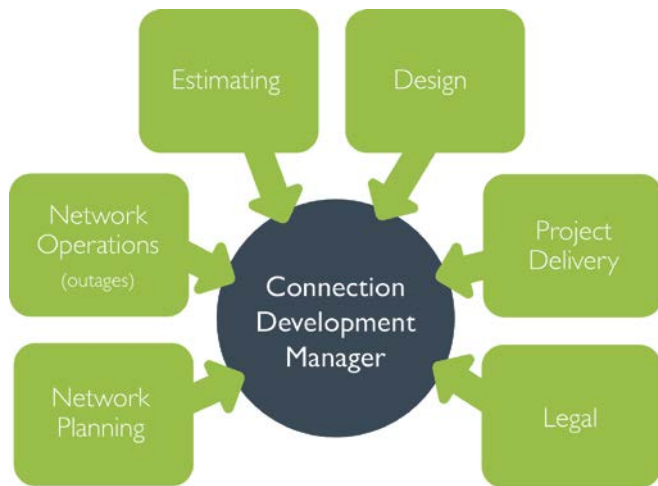
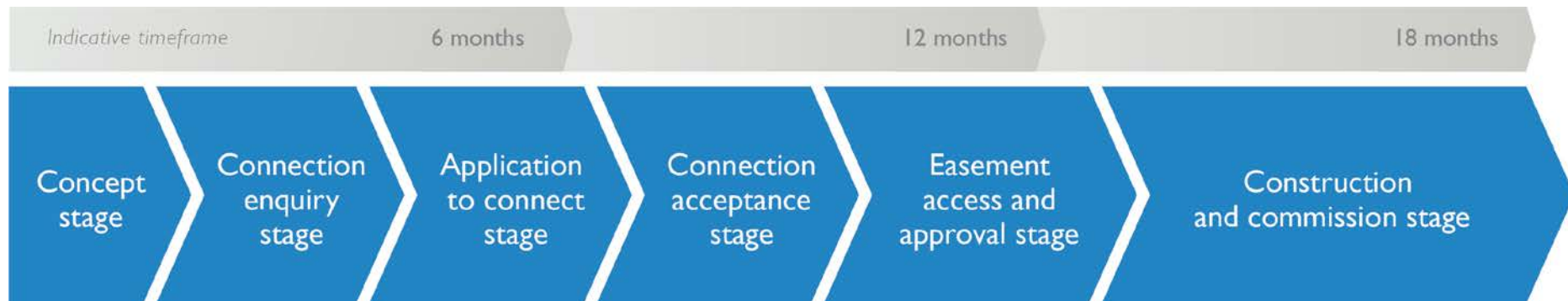
# Renewable enquiries



# Renewable connections



# Connection process



- Connection Development Manager central to connection process
- Customer advocate through construction and commissioning, operation and maintenance



# Key considerations for proponents



- Transmission Connections and Planning Rule changes from July 2018
- Network constraints exist across parts of Queensland
- Measures can be taken to help facilitate a smooth connection process



# Rule changes



Information  
requirements of  
TNSP



Identified User  
Shared Assets  
(IUSA)



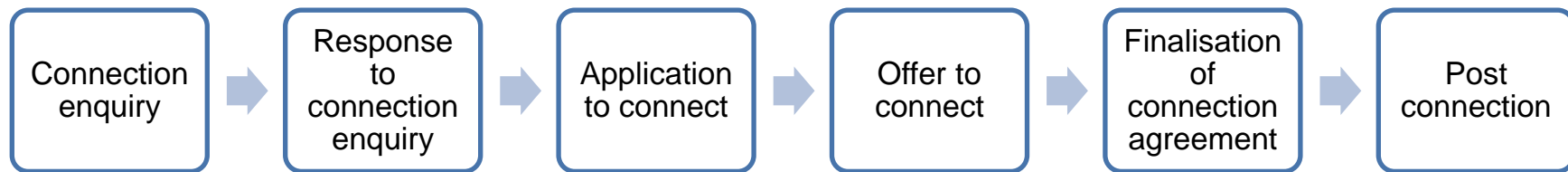
System Strength  
Guidelines

Transmission Connection and Planning

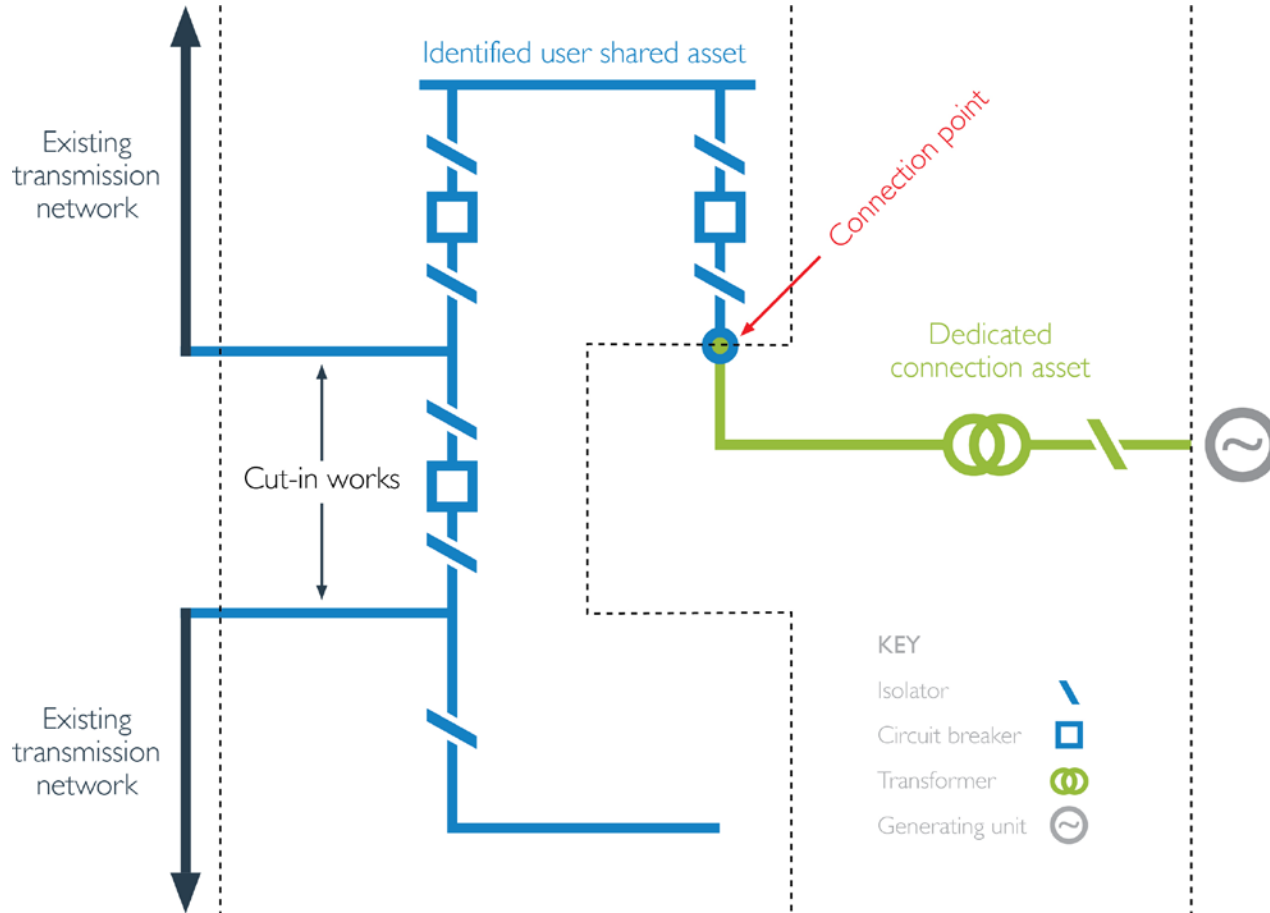
System Strength



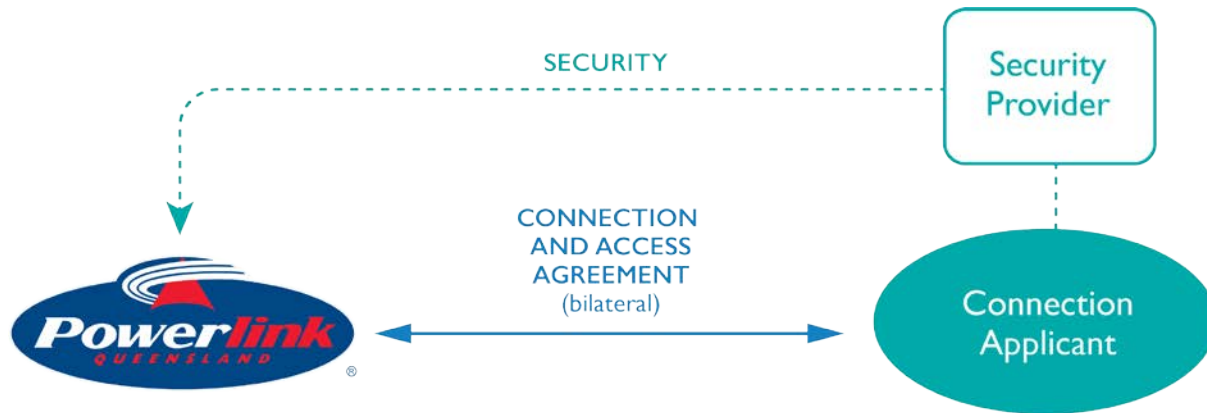
# TNSP information requirements



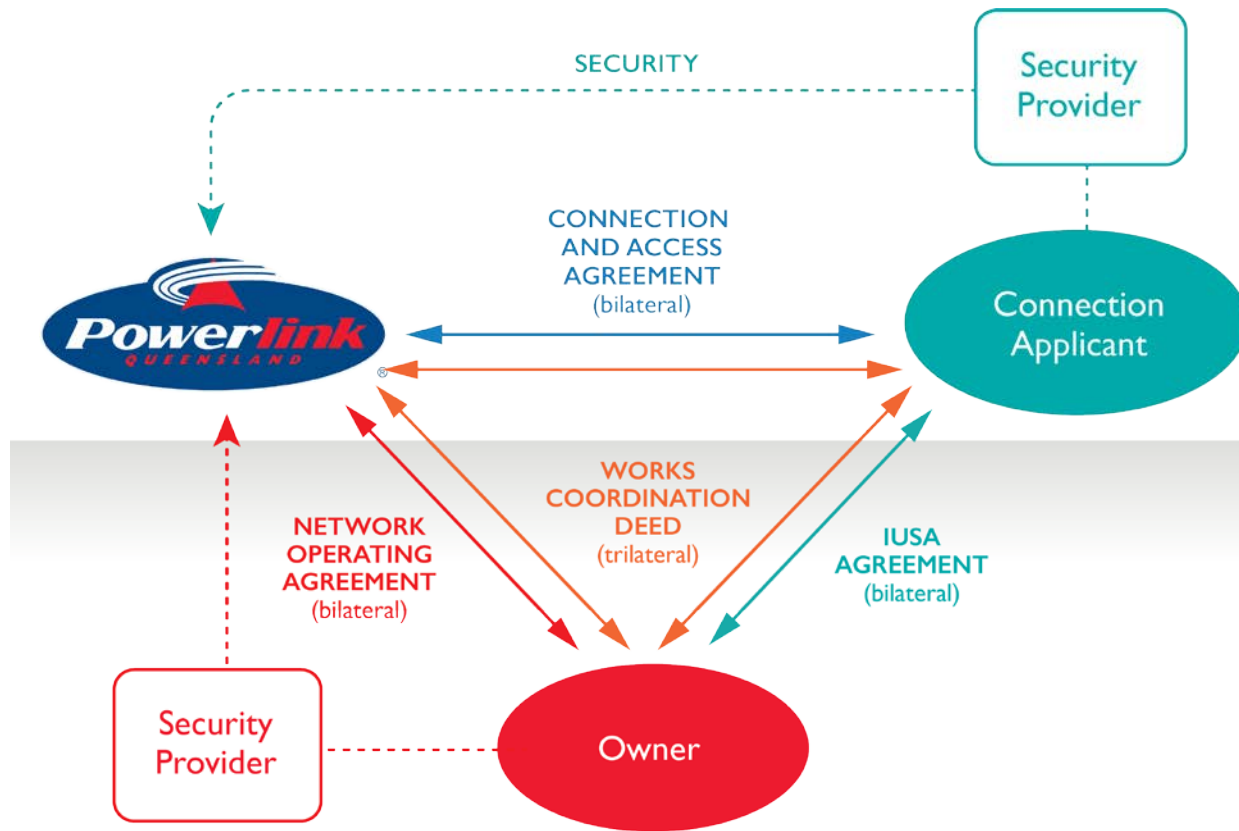
# Identified User Shared Assets



# IUSA Contractual Suite



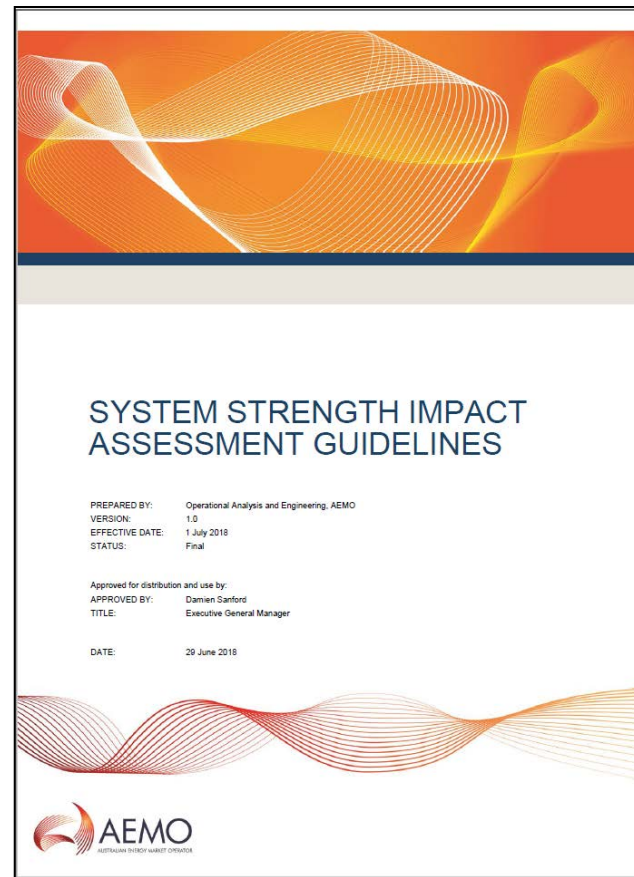
# IUSA Contractual Suite



# System Strength Guidelines



- New connecting generators
  - obligation to 'do no harm' to the level of system strength necessary to maintain the security of the power system
- required to fund the costs associated with the provision of any required system strength services



# Guidelines: PIA and FIA



## Preliminary Impact Assessment (PIA)



Screening method to determine whether a new generator may impact system strength



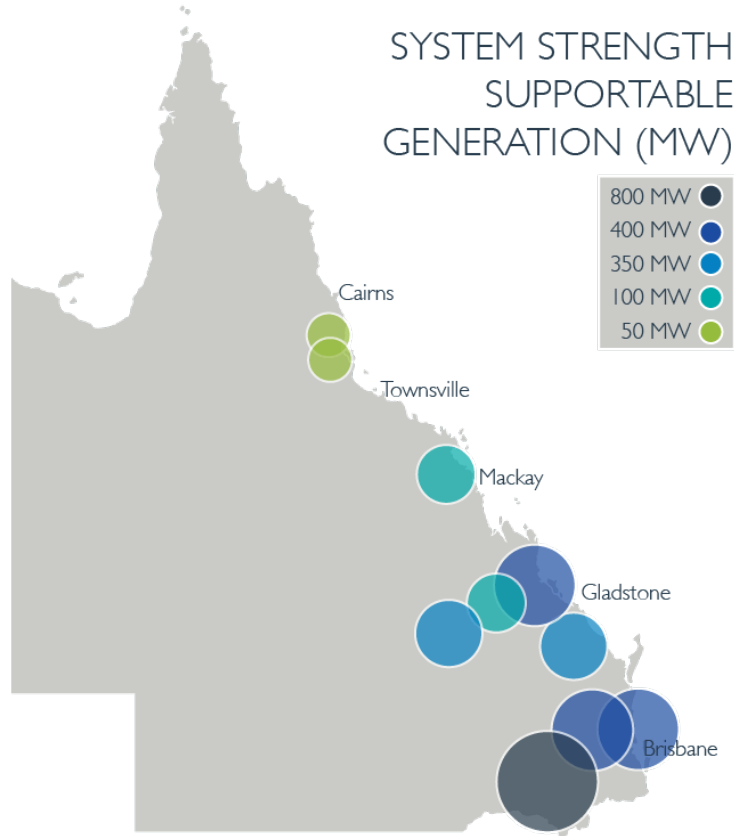
## Full Impact Assessment (FIA)

NSPs must undertake a FIA for any generator that may impact system strength





# Network capacity






- Capacity is represented as at 30 June 2018
- Does not include potential or existing network constraints
- Does not represent thermal headroom in the network

# Smooth connection process






## Optimise site selection

-  Proximity to existing network
-  Land topography
-  Location of other generators






## Understand the regulatory environment

-  National Electricity Rules
-  Generator Performance Standards (PSSE and PSCAD)
-  System Strength (PIA and FIA)

# Smooth connection process






## Establish early relationships

-  Network service providers
-  AEMO
-  Department of Natural Resources, Mines and Energy



## Construction program

-  Safety is essential
-  Availability of network outages
-  Site access

# What you told us at the last forum



Presentation focused on an overview of the connections Rule change and wider regulatory framework:

Theme	Feedback	What we have done
Information provision	<ul style="list-style-type: none"><li>• Greater transparency</li><li>• Simplified or standardised information</li><li>• Clarity around Timeframes</li></ul>	<p>Significantly more information published on Powerlink website from 1 July (NER requirement) including:</p> <ul style="list-style-type: none"><li>• Standard terms</li><li>• Network capacity</li><li>• Functional specifications</li><li>• Standard drawings</li><li>• Typical layouts</li></ul> <p>Interim system strength industry process.</p>
Functional Specification	<ul style="list-style-type: none"><li>• Publish more information</li></ul>	As above
Network Operating Agreement	<ul style="list-style-type: none"><li>• Publish standard documents</li></ul>	Combination of Networking Operating Agreement (NOA) and Works Coordination Deed (WCD) published that deal with charges, processes, spares, access rights, access and site procedures

# Questions



1. What recent or upcoming changes are you aware of that will improve or impact on the connection process?
2. How can Powerlink improve its service to respond to these changes?
3. How else can Powerlink help you through the connection process?





# Thank you for attending

